

REMARKS

Claims 1, 5, 8, 9, 14, 16 and 25-27 are pending in the present application. Claim 1 has been amended to recite that the layer of adhesive resin is "thermally bonded" to the surface treated layer. Support for this amendment can be found in the first full paragraph on page 15 of the specification. No new matter has been added by way of the above-amendment.

Prior Art Rejections

(1) Rejection of Claims 1 and 5 under 35 USC 102(e)

Claim 1 stands newly-rejected under 35 USC 102(e) as being anticipated by Nonaka et al 2002/0138958. Applicants respectfully traverse the rejection.

In the section numbered as "2" of the Final Office Action, the Examiner has taken the position that the secondary battery given in Fig. 11 of Nonaka et al. has the same lamination structure as that according to the present invention. However, Applicants respectfully submit that the order of layers is different between the inventive laminate and the laminate of Nonaka et al.

The Examiner has equated the layers of the inventive laminate with the laminate of Nonaka et al. as follows:

Layers of the laminate of Nonaka et al.	Layers of the Inventive Laminate
Separator 5	Adhesive resin layer
Electrode 35	Electrode
Insulating oxide film 4	Surface treated layer
Aluminum foil 1	Metal layer

However, the inventive laminate contains the layers in a different order than the laminate of Nonaka et al. This difference is shown in the following table:

Order of Layers of the laminate of Nonaka et al.	Order of Layers of the Inventive Laminate
Separator 5	Electrode
Electrode 35	Adhesive resin layer
Insulating oxide film 4	Surface treated layer
Aluminum foil 1	Metal layer

In view of the fact that the order of layers is not identical, the inventive laminate is patentably distinct from Nonaka et al.

Furthermore, the present invention provides an improved electrode protecting laminate over the laminate of Nonaka et al. First, Nonaka et al. teach a lamination structure wherein the electrode layer 35 is interposed between the metal layer 1 and the separator film 5 which is distinct from the inventive order of layers. Second, Nonaka et al., teach that the separator 5 is a "porous polypropylene" film (see paragraph 0015). However, it would be clear to the skilled artisan that such a polyolefin does not have adhesive properties¹. Third, Nonaka et al. do not teach any positive surface treatment of the metal layer, but teach the destruction of the passive oxide film by carbon particles piercing through the oxide layer for facilitating electric conduction between the metal layer and the electrode layer.

¹ The Examiner will note that the inventive adhesive layer is a polyolefin which has been "modified by carboxyl group or derivative thereof" to impart adhesive properties to the polyolefin.

In describing the requirements for rejection of a claim by anticipation, the Manual of Patent Examining Procedure (Section 2131) states:

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference (ref. omitted). The identical invention must be shown in as complete detail as is contained in the... claim (ref. omitted). The elements must be arranged as required by the claim... (ref. omitted)."

Furthermore, in *Ex Parte Levy*, 17 USPQ2d 1461 (BOPAI, 1990), the Board of Patent Appeals and Interferences has written:

"Moreover, it is incumbent upon the Examiner to identify wherein each and every facet of the claimed invention is disclosed in the applied reference (ref. omitted)."

Accordingly, Applicants respectfully indicate, every element in a claim must be found in the reference in order that the reference anticipates the claim. In view of the fact that Nonaka et al. fail to teach the inventive lamination structure nor the inventive adhesive layer, Nonaka et al. do not anticipate the claims. As such, Applicants respectfully request that the rejection be withdrawn.

(2) Rejection of Claim 1 under 35 USC 102(b)/103(a)

Claim 1 stands newly-rejected under 35 USC 102(b)/103(a) as being unpatentable over JP 54-99972². Applicants respectfully traverse the rejection.

² Should the Examiner maintain this rejection, the Examiner is requested to provide a complete English translation thereof. This patent was first cited by the Examiner in the July 6, 2005 Office Action, and unfortunately, it appears that a machine translation is not available from the JPO website.

The newly quoted prior art publication JP 54-99972 teaches a resin/metal laminate, which has a structure somewhat resembling to the laminate according to the present invention as noted by the Examiner. However, the laminate of JP 54-99972 is not directed to protection of electrode as in the present invention but is a flexible printed board in which the metal layer in a printed pattern is formed by electrodeposition on a specific polyethylene sheet. The polyethylene sheet is treated so as to make the sheet surface inactive in a specific print pattern and the electrodeposition of the metal layer is effected on the remaining surface without inactivation. JP 54-99972 does not teach surface treatment of metal a layer as taught by the present invention, and thus, JP 54-99972 has nothing to do with the present invention.

As the MPEP directs, all the claim limitations must be taught or suggested by the prior art to establish a *prima facie* case of anticipation or obviousness. See MPEP §§ 2131 and 2143.03. In view of the deficiencies in the teachings of JP 54-99972, withdrawal of the rejection is respectfully requested.

(3) Rejection of Claims 1, 5, 8-9, 14, 16 and 25-27 Under 35 USC 103(a)

Claims 1, 5, 8-9, 14, 16 and 25-27 stand rejected under 35 USC 103(a) as being unpatentable over JP 11-086808 (previously of record) in view of Nonaka et al. Applicants respectfully traverse the rejection.

Applicants have carefully reviewed the cited references and find that the present invention is patentable over them. Also, Applicants have carefully reviewed the Examiner's comments and are confused as to which aspects of the laminate of JP'808 and the laminate of Nonaka et al. are being equated with the inventive laminate. As such, Applicants will simply

focus on the distinctions between the inventive laminate and the laminates of JP'808 and Nonaka et al.

Applicants' comments regarding the patentable distinctions between the inventive laminate and the laminate of Nonaka et al. as provided above are equally applicable here, and as such are incorporated by reference.

Upon review of JP '808 and Nonaka et al., it is clear that none of these references teach or fairly suggest a laminate having the following features:

Order of Layers of the Inventive Laminate
Adhesive resin layer
Surface treated layer
Metal layer

Nonaka et al. teach several embodiments having differing constructions. In one embodiment, a thin metal oxide insulating layer 4 in paragraph 0067 which is positioned between a metal layer 1 and the positive electrode 35. Similar constructions are shown in Figs. 5 and 6. In another embodiment, Nonaka et al. also refer to an adhesive layer 9 for binding a polarizable electrode 30 (activated carbon layer) with the metal layer 1 as shown in Figs. 8 and 9. This construction of Figs. 8 and 9 also includes carbon particles 2 in the adhesive layer 9 for maintaining the electric conduction between the polarizable electrode 30 and the metal layer 1.

However, Nonaka et al. fail to teach or suggest that the metal oxide insulating layer 4 is to be used in conjunction with the adhesive layer 9. Furthermore, Nonaka et al. only refer to the adhesive as an "organic" adhesive (see paragraph 0101) and fail to teach or suggest that the adhesive is a polyolefin modified by carboxyl group or a derivative thereof as presently claimed.

JP '808 teaches a technique in which the metal layer and the plastic resin layer are bonded together directly by heat lamination, as noted in the former response to the Office Action. As such, the laminate of JP '808 does not have an inert passive film as in inventive laminate which has the inert passive film positioned between the metal layer and the plastic resin.

The Examiner appears to be relying on the teachings of JP '808 for use of an adhesive layer containing an acid-modified LDPE. Also, the Examiner relies heavily on the fact that this adhesive resin will somehow chemically react with the metal film to form an oxide *inherently* even though it has not been explicitly stated by JP '808 that an oxide film is formed, see the discussion at the top of page 8 of the outstanding Office Action. The Examiner should be aware that to support an anticipation rejection based upon inherency, an Examiner must provide factual and technical grounds establishing that the inherent feature *necessarily* flows from the teachings of the prior art. See *Ex parte Levy* 17 USPQ2d 1461 (BOPAI 1990); see also *In re Oelrich*, 212 USPQ 323 (CCPA 1981) holding that inherency *must* flow as a necessary conclusion from the prior art, not simply a possible one. Here, Applicants have provided comments in the May 9, 2005 Amendment (beginning on page 7 at the bottom) supported by extensive experimental evidence in the present specification that there is a ***structural distinction*** between a laminate formed by combining an adhesive to a metal film directly as opposed to a laminate made by first forming an oxide layer by oxidative or acid treatment of the metal layer and in a subsequent step, adding an adhesive over the intermediate oxide layer. Accordingly, the alleged inherent feature does not necessarily flow from the teachings of JP '808.

As the MPEP directs, all the claim limitations must be taught or suggested by the prior art to establish a *prima facie* case of obviousness. See MPEP § 2143.03. In view of the above-

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described deficiencies in the teachings of Nonaka et al. and JP '808, withdrawal of the rejection is respectfully requested.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Garth M. Dahlen, Ph.D., Esq. (Reg. No. 43,575) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

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Respectfully submitted,

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